DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: FOURTH LAKE Lake Area (ha): 1.01 Maximum depth (m): Town: PITTSBURG 1.5 Mean depth (m): County: Coos 0.6 River Basin: Connecticut Volume (m³): 5500 volume (m²): Relative depth: Latitude: 45°14'50" N 1.4 Longitude: 71°12'48" W Shore configuration: 1.12 Elevation (ft): 2600 Shore length (m): 400 Areal water load (m/yr): 51.52 Flushing rate (yr⁻¹): 91.60 P retention coeff.: 0.35 Watershed area (ha): 62.2 % watershed ponded: 0.0

Lake type:

BIOLOGICAL:	1 February 1995	1 August 1994
DOM. PHYTOPLANKTON (% TOTAL) #:	. SPARSE - NO DOMINANT	SPARSE - NO DOMINANT
#:		
#:		
PHYTOPLANKTON ABUNDANCE (units/mL		
CHLOROPHYLL-A (µg/L)		1.42
DOM. ZOOPLANKTON (% TOTAL) #:	. SPARSE - NO DOMINANT	SPARSE - NO DOMINANT
#:		(NO COUNTS TAKEN)
#:		
ROTIFERS/LITER	2	
MICROCRUSTACEA/LITER	<1	
ZOOPLANKTON ABUNDANCE (#/L)	2	
VASCULAR PLANT ABUNDANCE		Common
SECCHI DISK TRANSPARENCY (m)		1.5 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)	6.2	9.2
BACTERIA (E. coli, #/100 ml) #		
#	2	
#	3	

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m^3) : None Anoxic volume (m^3) : None

CHEMICAL:	AL: Lake: FOURTH LAKE Town: PITTSBURG			
	1 February 1995		1 August 1994	
DEPTH (m)	0.7		0.5	
pH (units)	5.9		5.4	
A.N.C. (Alkalinity)	9.0		1.7	
NITRATE NITROGEN	0.14		0.05	
TOTAL KJELDAHL NITROGEN	0.50	,	0.48	
TOTAL PHOSPHORUS	0.013		0.018	
CONDUCTIVITY (µmhos/cm)	25.5		23.0	
APPARENT COLOR (cpu)	85			
MAGNESIUM			0.29	
CALCIUM			2.5	
SODIUM				
POTASSIUM			0.20	
CHLORIDE	< 2		< 2	
SULFATE	3		3	
TN : TP	49		29	
CALCITE SATURATION INDEX			5.3	

All results in mg/L unless indicated otherwise

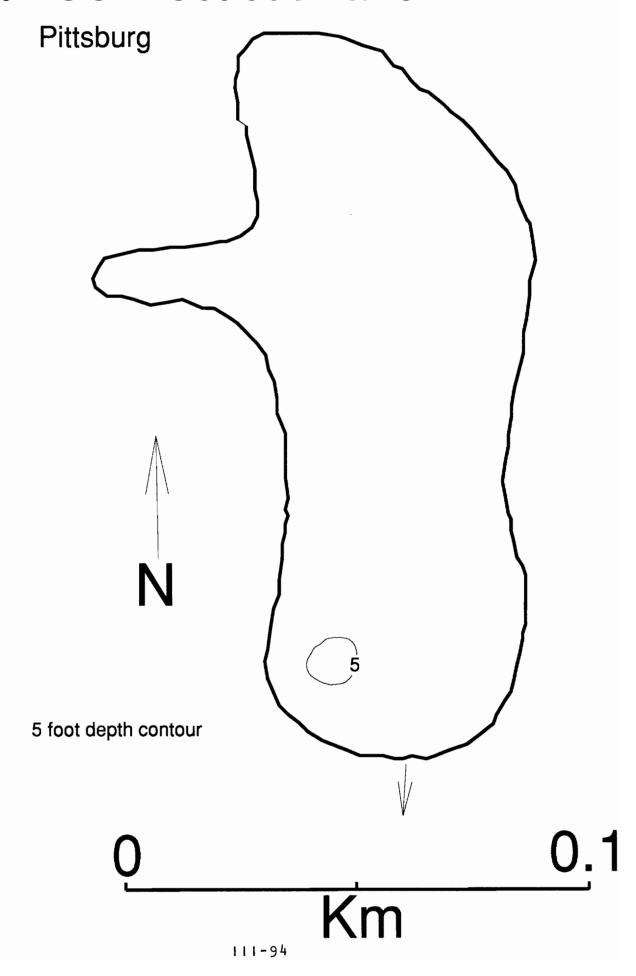
TROPHIC CLASSIFICATION: 1994

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	3	3	0	6	Meso.

COMMENTS:

- 1. AKA Fourth Connecticut Lake.
- This is a small, shallow remote pond surveyed cooperatively with the NH Fish and Game Department. It is located near the Canadian border and forms the headwaters of the Connecticut River. It is essentially a teacolored beaver pond surrounded by wetland and bog plants.

Fourth Connecticut Lake



FIELD DATA SHEET

LAKE: FOURTH LAKE

DATE: 08/01/94

TOWN: PITTSBURG

WEATHER: HAZY, HOT & HUMID

DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.1	20.0	7.9	85 %
0.5	19.0	8.1	87 %
1.0	16.9	9.2	93 %

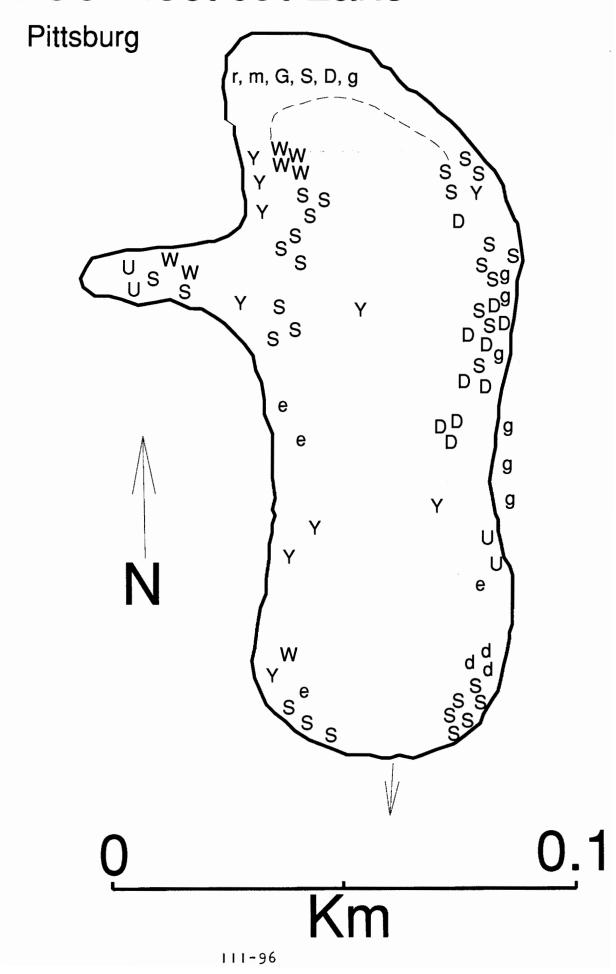
SECCHI DISK (m): 1.5 VOB COMMENTS:

BOTTOM DEPTH (m): 1.5

TIME: 1400

*Dissolved oxygen values are in mg/L

Fourth Connecticut Lake



AQUATIC PLANT SURVEY

TOWN: PITTSBURG

DATE: 08/01/94

PLANT NAME **ABUNDANCE** Key GENERIC COMMON Sweet gale Common Myrica gale g Scattered Y Nuphar Yellow water lily D Decodon verticillatus Swamp loosestrife Common W Potamogeton Pondweed Sparse S Bur reed Sparganium Common G Grass family Gramineae Common m Sphagnum Peat moss Common Drosera Sundew r Common U Utricularia Bladderwort Sparse е Eleocharis Spike rush Sparse Dulichium arundinaceum Three-way sedge Sparse

OVERALL ABUNDANCE: Common

GENERAL OBSERVATIONS:

LAKE: FOURTH LAKE

- 1. The overall abundance does not include the abundant shoreline vegetation that surrounded the pond but was out of the water.
- 2. The pond was surrounded by sweet gale, sphagnum, grasses, sundew and swamp loosestrife.